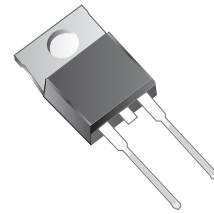


CGR860T-G

Reverse Voltage: 600 V

Forward Current: 8.0 A

RoHS Device

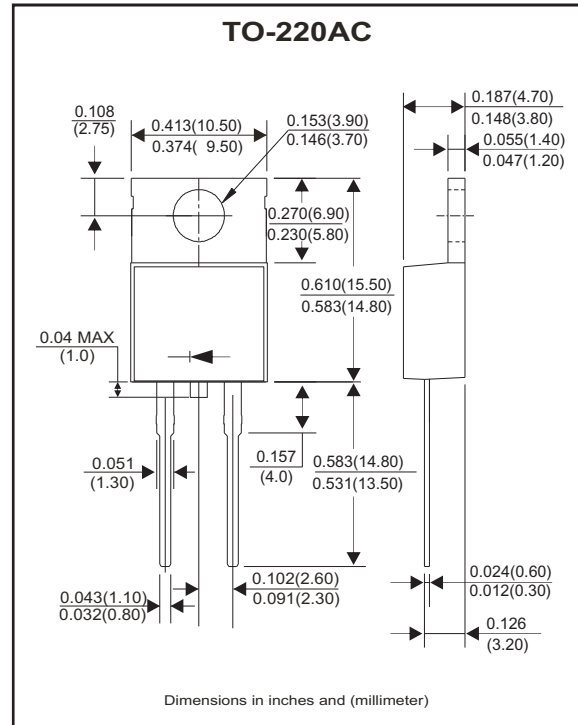


Features

- Soft recovery characteristic.
- Low forward voltage.
- Low recovery loss.
- High surge current capability.

Mechanical Data

- Case: TO-220AC, molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 2.14 grams



Maximun Ratings (at T_J=25°C unless otherwise noted)

Parameter	Symbol	CGR860T-G	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	600	V
Average Rectified Forward Current	I _{F(AV)}	8	A
Non-Repetitive Surge Forward Current T _P = 10ms(50HZ) Sine Wave	I _{FSM}	110	A
Avalanche Energy with Single Pulse (L=40mH)	E _{AS}	80	mJ
Maximum Power Dissipation	P _D	50	W
Junction-to-Case Thermal Resistance, Per Leg	R _{θJC}	2.5	°C/W
Junction-to Ambient Thermal Resistance, Per Leg	R _{θJA}	70	°C/W
Operating Junction and Storage Temperatures	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics and Curves (at T_J=25°C unless otherwise noted)

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Breakdown Voltage	I _R = 100μA	V _{BR}	600			V
Forward Voltage	I _F = 8A	V _F		1.7	2.1	V
	I _F = 8A , T _J = 125°C	V _F		1.4	1.9	V
Reverse Leakage Current	V _R = 600V	I _R			10	μA
	V _R = 600V , T _J = 125°C	I _R			250	μA

Dynamic Recovery Characteristics

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Reverse Recovery Time	I _F = 1A , V _R = 30V , di _F /dt = -200A/μs	t _{rr}		18	28	ns
Reverse Recovery Time	I _F = 8A , V _R = 300V di _F /dt = -200A/μs	t _{rr}		22		ns
Peak Recovery Current		I _{RRM}		2.5		A
Reverse Recovery Charge		Q _{rr}		28		nC
Reverse Recovery Time		t _{rr}		48		ns
Peak Recovery Current	I _F = 8A , V _R = 300V di _F /dt = -200A/μs , T _J =125°C	I _{RRM}		5.5		A
Reverse Recovery Charge		Q _{rr}		135		nC

RATING AND CHARACTERISTIC CURVES (CGR860T-G)

FIG.1 - Average Forward Current vs. Max. Allowable Case Temperature

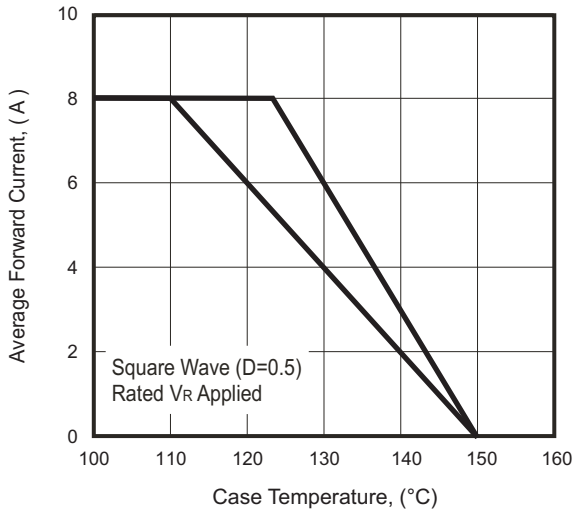


FIG.2 - Typical Junction Capacitance vs. Reverse Voltage

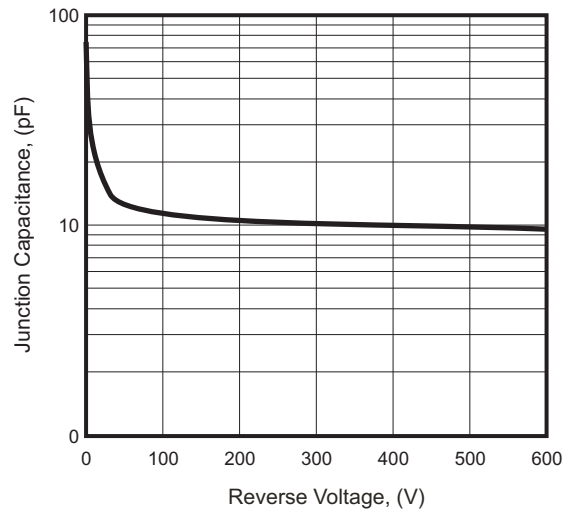


FIG.3 - Typical Value of Reverse Current vs. Reverse Voltage

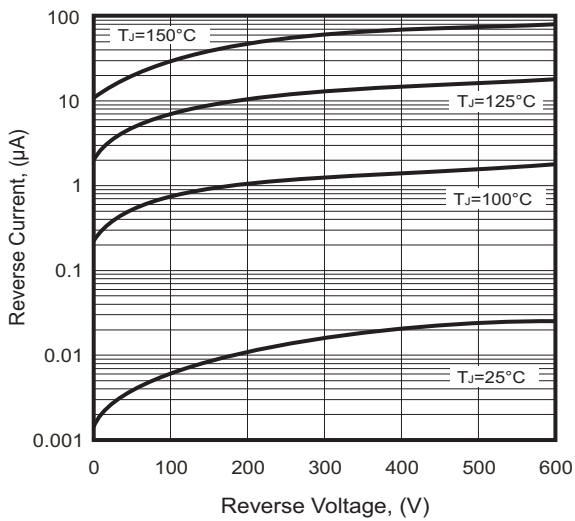
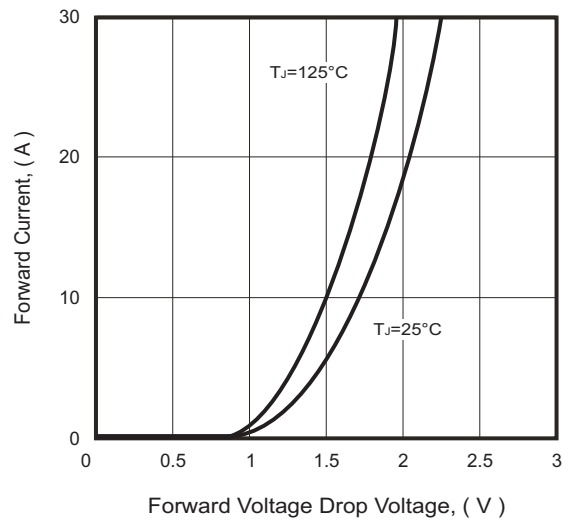
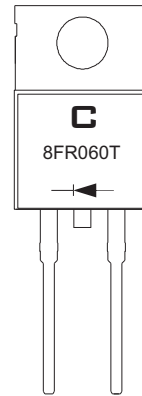


FIG.4 - Typical Forward Voltage Drop Characteristics



Marking Code

Part Number	Marking code
CGR860T-G	8FR060T



☐ = Comchip Logo

Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
TO-220AC	50	2,000